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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,427	02/18/2004	Kanada Nakayasu	P/2288-39	6701

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EXAMINER	
APPIAH, CHARLES NANA	
ART UNIT	**PAPER NUMBER**
2617	

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/782,427	NAKAYASU, KANADA	
	Examiner	Art Unit	
	Charles N. Appiah	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7,9-12 and 14* is/are rejected.

7)☒ Claim(s) *4,8 and 13* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/18/04, 3/29/04,3/20/06*
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 2/18/04, 3/29/04 and 3/20/06 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner has considered the information disclosure statements.

Claim Objections

3. Claims 1, 6 and 10 are objected to because of the following informalities:

It appears that "the information" on line 10 of claim 1, line 8 of claim 6 and line 10 of claim 10 should be changed to "information" in order to correct an apparent typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 5,6, 9, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Wallentin et al. (6,154,450).

Regarding claims 1, 6 and 10 Wallentin discloses (with reference to Fig. 1), a mobile communication system, a radio base station controller and a transmitting and receiving power control method for use in a mobile communication system comprising a radio base station controller for performing at least a radio line control and a resource control for the radio base station, comprising a radio base station controller (24) for performing at least a radio line control and a resource control for the radio base station (20), and at least a radio line control, a resource control and a bearer control (inherent feature of mobile switching center 24), for a mobile terminal (22A ...22N), wherein the radio base station controller comprises control means (controller 64), for controlling a communication quality between the radio base station and the mobile terminal on the basis of information regarding the amount of interference from the radio base station (see col. 5, lines 7-61).

Regarding claim 5, 9 and 14 Wallentin further discloses wherein power control with the communication quality is made in at least one of up line and a down line between the radio base station and the mobile terminal (see Fig. 6, 26-39).

6. Claims 1-3, 5-7, 9-11, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ariyavisitakul et al. (5,333,175).

Regarding claim 1, Ariyavisitakul discloses a mobile communication system comprising a radio base station controller (10) for performing at least a radio line control and a resource control for the radio base station (30, 40, 50, 70), and at least a radio line control, a resource control and a bearer control for a mobile terminal (42, 44, 46, 48, 52, 54, 56, 58, ...76), wherein the radio base station controller comprises control

means (power control algorithm being performed at a situs common to more than one port, such as central office, 10, see col. 12, lines 59-67), for controlling a communication quality between the radio base station and the mobile terminal on the basis of information regarding the amount of interference from the radio base station (dynamically controlling output power of a port that is communicating with a portable on a particular channel using measurement of RSSI, WEI and a quality measure (QM), see col. 9, line 30 to col. 10, line 23).

Regarding claim 2, Ariyavisitakul further discloses wherein the radio base station comprises means for measuring a radio quality between the mobile terminal and the base station (feature of being able to make a measurement at the port, as for example, a quality measure, QM, of the signal received uplink from the portable, see col. 13, lines 8-24), and means for notifying the information regarding the amount of interference based on a comparison result between its measurement result and a preset threshold (see col. 14, lines 35-53).

Regarding claim 3, Ariyavisitakul further discloses wherein the control means makes the communication by maximizing the communication quality when the amount of interference is small, and requests either the radio base station or the mobile terminal to degrade the communication quality when the amount of interference is large (response to a QM degradation leading to an increase in uplink power and power reduction, and power decreasing when QM is below its threshold, see col. 14, lines 35-53).

Regarding claim 5, Ariyavisitakul further discloses wherein power control with the communication quality is made in at least one of upline and a downline between the radio base station and the mobile terminal (measures of RSSI, WEI and QM in each frame received as transmitted from the port to the portable unit (or from the portable to the port, see col. 9, lines 30-53).

Regarding claim 6, Ariyavisitakul discloses a radio base station controller (feature of appropriate switch located within a local central office, (see col. 10, line 64 to col. 11, line 2 and power control algorithm being performed at a situs common to more than one port, such as central office, 10, see col. 12, lines 59-67), for inherently performing at least a radio line control and a resource control for the radio base station, and at least a radio line control, a resource control and a bearer control for a mobile terminal , wherein the radio base station controller comprises control means for controlling communication quality between the radio base station and the mobile terminal on the basis of information regarding the amount of interference from the radio base station (dynamically controlling output power of a port that is communicating with a portable on a particular channel using measurement of RSSI, WEI and a quality measure (QM), see col. 9, line 30 to col. 10, line 23, and power control algorithm being performed at a situs common to more than one port, such as central office, 10, see col. 12, lines 59-67).

Regarding claim 7, Ariyavisitakul further discloses wherein the control means makes the communication by maximizing the communication quality when the amount of interference is small, and request either the radio base station or the mobile terminal

to degrade the communication quality when the amount of interference is large (response to a QM degradation leading to an increase in uplink power and power reduction, and power decreasing when QM is below its threshold, see col. 14, lines 35-53).

Regarding claim 9, Ariyavisitakul further discloses wherein power control with the communication quality is made in at least one of up line and a down line between the radio base station and the mobile terminal (measures of RSSI, WEI and QM in each frame received as transmitted from the port to the portable unit (or from the portable to the port, see col. 9, lines 30-53).

Regarding claim 10, Ariyavisitakul discloses a transmitting and receiving power control method for use in a mobile communication system comprising a radio base station controller for performing at least a radio line control and a resource control for the radio base station (30, 40, 50, 70), and at least a radio line control, a resource control and a bearer control for a mobile terminal (42, 44, 46, 48, 52, 54, 56, 58, ...76), the method comprising, on the side of the radio base station controller (power control algorithm being performed at a situs common to more than one port, such as central office, 10, see col. 12, lines 59-67), a step of controlling a communication quality between the radio base station and the mobile terminal on the basis of information regarding the amount of interference from the radio base station (dynamically controlling output power of a port that is communicating with a portable on a particular channel using measurement of RSSI, WEI and a quality measure (QM), see col. 9, line 30 to col. 10, line 23).

Regarding claim 11, Ariyavisitakul further discloses wherein the radio base station comprises a step of measuring a radio quality between the mobile terminal and the base station (feature of being able to make a measurement at the port, as for example, a quality measure, QM, of the signal received uplink from the portable, see col. 13, lines 8-24), and means for notifying the information regarding the amount of interference based on a comparison result between its measurement result and a preset threshold (see col. 14, lines 35-53).

Regarding claim 12, Ariyavisitakul further discloses wherein the control means makes the communication by maximizing the communication quality when the amount of interference is small, and request either the radio base station or the mobile terminal to degrade the communication quality when the amount of interference is large (response to a QM degradation leading to an increase in uplink power and power reduction, and power decreasing when QM is below its threshold, see col. 14, lines 35-53).

Regarding claim 14, Ariyavisitakul further discloses wherein power control with the communication quality is made in at least one of up line and a down line between the radio base station and the mobile terminal (measures of RSSI, WEI and QM in each frame received as transmitted from the port to the portable unit (or from the portable to the port, see col. 9, lines 30-53).

Allowable Subject Matter

7. Claims 4, 8 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toskala et al. (6,374,118) discloses a method for physical channel power control in a radio communication system.
Gilhousen et al. (5,812,938) discloses a reverse link closed loop power control method in a CDMA system.
Hill et al. (6,131,015) discloses a method for performing dynamic channel control in a two-way communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

CHARLES APPIAH
PRIMARY EXAMINER